

REMARKS

Claims 1-26 are currently pending in the subject application, and are presently under consideration. Claims 1, 2, 6, 14, 15, 17 and 22-24 are rejected. Claims 3-5, 7-13, 16, 18-21, 25 and 26 have been indicated as allowable. Claims 2 and 18 have been cancelled. Claims 1, 3-4, 6, 17 and 22 have been amended. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Claim Objections

Claim 3 is objected to because of certain formalities. Claim 3 has been amended remove these informalities.

II. Rejection of Claims 1, 2, 6, 14, 15, 17 and 22-24 Under 35 U.S.C. §102(b)

Claims 1, 2, 6, 14, 17 and 22-24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Bell (U.S. Patent No. 5,898,342), hereinafter "Bell". Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 17 has been amended to include the allowable elements of claim 18, and claim 18 has been cancelled. Therefore, claim 17 and claims 19-21, which depend therefrom should be allowable. Allowance of claims 17 and 19-21 is respectfully requested.

Claim 1 has been amended to recite a supply control that provides a digital supply signal according to the determined profile and a supply assembly that processes the digital supply signal to provide a supply voltage corresponding to the supply signal profile to the power amplifier.

Bell discloses in FIG. 2, a signal processor that analyzes an input signal and generates a control signal to a power switch which is used to couple an appropriate supply voltage level to an amplifier. In Fig. 3, Bell discloses a comparator logic that analyzes an input signal and controls a switching supply to provide an appropriate set of positive and negative rails from which an

amplifier is powered. It is well known that an output amplitude of a switching amplifier is based on a duty cycle of a square wave input signal to the switching amplifier.

Bell does not disclose a supply control that provides a digital supply signal according to the determined profile and a supply assembly that processes the digital supply signal to provide a supply voltage corresponding to the supply signal profile to the power amplifier, as recited in claim 1.

The Examiner cites the DAC (226) of Bell to be read as the claimed supply assembly. Applicant's representative respectfully disagrees. The DAC (226) of Bell is in the input path of the amplifier (218) for converting a digital input signal into an analog input signal to the amplifier. The DAC (226) of Bell does not have any association with the voltage supply of the amplifier (216). Additionally, Bell does not disclose providing a digital supply signal based on the determined profile or a supply assembly that process the digital supply signal to provide a supply voltage corresponding to the supply signal profile, as recited in amended claim 1. Therefore, Bell does not teach each and every element of claim 1, and therefore does not anticipate claim 1 and claims 3-17, which depend therefrom.

Claim 6 recites the supply assembly comprises a DAC and an amplifier. The Examiner also recites that the DAC (226) of Bell to be read as the claimed DAC and amplifier of claim 6. Applicant's representative again respectfully disagrees. The DAC (226) of Bell is in the input path of the amplifier (218) for converting a digital input signal into an analog input signal to the amplifier. The DAC recited in claim 6 is in the supply path and is part of the supply assembly. Additionally, Bell does not disclose an amplifier in the supply path. Therefore, Bell does not teach each and every element of claim 6, and therefore does not anticipate claim 6.

Claim 22 has been amended to recite means for building a supply profile based on analyzing a signal envelope corresponding to an input signal over a period of time and based on one of maintaining a predetermined maximum slew rate, optimizing an efficiency parameter, and optimizing a linearity parameter. These elements have been incorporated from allowable claims 3 and 4. Bell does not discuss building a supply profile based on analyzing a signal envelope and based on one of maintaining a predetermined maximum slew rate, optimizing an efficiency

parameter, and optimizing a linearity parameter. Therefore, Bell does not teach each and every element of claim 22, and therefore does not anticipate claim 22 and claims 23-26, which depend therefrom.

Claim 24 recites means for converting at least a portion of the input signal from the digital domain to the analog domain directly to a desired radio transmission frequency. The Examiner also recites that the DAC (226) of Bell to be read as the claimed means of claim 24. Applicant's representative again respectfully disagrees. The DAC (226) of Bell converts the input signal into an analog input signal. Bell does not disclose converting the input signal to the analog domain directly to a radio transmission frequency. The DAC of Bell would need to employ a mixer to convert the signal to a radio transmission frequency. Therefore, Bell does not teach each and every element of claim 24, and therefore does not anticipate claim 24.

For the reasons described above, claims 1, 2, 6, 14, 15, 17 and 22-24 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

Serial No. 10/717,695

Docket No. NG(ST)6756

CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date

5/5/05

Christopher P. Harris

Christopher P. Harris

Registration No. 43,660

CUSTOMER No.: 26,294

TAROLLI, SUNDHEIM, COVELL, & TUMMINO L.L.P.

526 SUPERIOR AVENUE, SUITE 1111

CLEVELAND, OHIO 44114-1400

Phone: (216) 621-2234

Fax: (216) 621-4072